

deux postoculaires. Temporales 2+3. La préoculaire ne touche pas la frontale.

Le corps est en dessus gris très finement pointillé; en dessous il conserve une teinte rougeâtre sans doute plus vive à l'état de vie. Le ventre porte de nombreuses taches noires, quadrilatères, irrégulièrement distribuées. Une fourche brune naît sur la frontale et étend ses branches un peu sur les suroculaires et les préfrontales postérieures. Un croissant rouge bordé de noir couvre en grande partie les pariétales et l'extrémité postérieure des suroculaires; au milieu il est divisé par une bandelette longitudinale noire, au centre de laquelle on voit un point blanc. Sur l'occiput et le cou s'étend un triangle (dont la base, qui est antérieure comme la partie concave du croissant, est excavée) rouge bordé de noir, portant au centre un ovale plus clair, bordé et tiqueté de noir. Sur le reste du corps, la queue incluse, il y a 40 taches rouges dilatées en travers et bordées de noir. L'extrémité de la queue est noire, et constituée par un étui corné sillonné en dessous. Sur les flancs on observe de petites taches noires, souvent opposées aux taches du dos, et des raies verticales noires. Toutes ces taches du dos et des flancs, ainsi que le triangle nuchal, sont entourées d'un liseré blanc.

14 dents au maxillaire. Les dents antérieures de cet exemplaire sont en partie cassées, mais leur base indique qu'elles sont grandes et fortes; les suivantes sont courtes et plus rapprochées entr'elles, et les 2 ou 3 dernières, non séparées, sont de nouveau plus grandes. La petitesse des dents moyennes distingue le genre *Oreophis* du genre *Coronella*, dont il est très voisin.

Je dédie cet élégant ophidien à mon collègue M. Boulenger, que je prie d'accepter cette bien légère marque de mon estime.

5. On the Dates of the Natural History portion of Savigny's 'Description de l'Égypte.' By C. DAVIES SHERRORN, F.Z.S.

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The dates of the various portions of Savigny's 'Égypte' have always been very obscure. The following notes are offered as affording an approximation to the dates, and as an assistance to those who may attempt in future to solve the mystery of them.

The various portions will be taken seriatim:—

VOL. I., part 1, "*Poissons du Nil*" by Geoffroy, pp. 1-52: was reviewed in the *Gött. gelehr. Anz.* (1811), p. 1234. It formed part of Livr. 1, which was published in **1809**. See also Férussac, *Bull. Sci. Nat.* 1830, p. 319. There is a copy in the Gray Tracts, Brit. Mus. (Nat. Hist.), which bears an imprint of 1810.

VOL. I., part 1, "*Oiseaux de l'Égypte et de la Syrie*" by J. C. Savigny, pp. 63-114: was reviewed in the *G. g. A.* (1811),

p. 1234. A separate copy in the Tweeddale Library, Brit. Mus. (Nat. Hist.), has on the title 1810, and includes "Observations sur le système des Oiseaux de l'Égypte," dated 5 Dec., 1810, and "à Paris de l'imprimerie impériale, 1811." There is also a footnote on A2 "Le premier ordre de ce système a paru en 1809, dans la première livraison de l'ouvrage général." There is no doubt that Livr. 1 appeared in 1809 and that the "Oiseaux" formed a part of it: therefore the date is **1809**.

VOL. I., part 1, "*Reptiles*" by Geoffroy, pp. 115-120: by Isidore Geoffroy, pp. 121-160: explication des planches des Reptiles, by V. Audouin, pp. 161-184.

"*Crocodiles*" by Geoffroy, pp. 185-264.

"*Suite des Poissons du Nil*" by Isidore Geoffroy, pp. 265-310.

"*Poissons de la Mer Rouge*" by Isidore Geoffroy, pp. 311-343.

I take these parts all together. The *Reptiles* of Etienne Geoffroy was completed by his son Isidore, and an explanation of the plates was given by Audouin. The *Suite des Poissons* and the *Poissons de la Mer Rouge* were reviewed in Férussac's *Bulletin* (xx., 1830, p. 319) as having recently appeared. Isidore Geoffroy, writing in Du Petit Thouars's 'Voyage de la Vénus' (Mamm. p. 2, f.n.), says: "Dans les parties erpétologique et ichthyologique du grand ouvrage sur l'Égypte, 1827." In the 8vo edition of Savigny, the Reptiles, Fishes, and Crocodiles occupy vol. xxiv., which was published in 1829; while it is certain that many of the *explications des planches* of Audouin were published in 1826.

In Férussac, *Bull. Sci. Nat.* xix., 1829, p. 336, and xx., 1830, pp. 147 and 319, the two volumes of Natural History of Egypt are reviewed. Georges Cuvier dated his preface to the 2nd edition of 'Le Règne Animal,' Octobre 1828, at which date we may with safety assume that his work was finished. He was the most likely person to see the 'Histoire Naturelle de l'Égypte'; and an examination of his volumes shows that, though he was familiar with the *plates*, he had not seen the whole of the text by the date he wrote his preface. Unfortunately Cuvier frequently omitted to quote more than the plate in his references, and this makes our enquiry more difficult. So far as Mammals are concerned, Cuvier quotes thrice only (pp. 115, 119, and 120), but these quotations do not settle anything. In Vol. ii. of 'Règne Animal,' dealing with Reptiles and Fishes, he quotes the work many times, and notably the *text* of the "Crocodiles" on p. 22. Now as the "Crocodiles" formed pp. 185-264 of Vol. I. of 'Hist. Nat. de l'Égypte,' we may conclude that pp. 115-264 of that volume, which included the Reptiles, were published before October 1828; and, accepting Isidore Geoffroy's statement in the Voyage of the Venus (*supra*) as correct, definitely fix the date as **1827**. The Fishes also, which form pp. 265-343 of the Vol. II. of the 'Hist. Nat. de l'Égypte,' are quoted only as plates by Cuvier in his 'Règne Animal.' In Cuvier and Valenciennes's *Hist. Nat. Poissons*, i., 1828, pp. 198, 199, Cuvier refers to the work as follows:—

"M. Isidore Geoffroy, son fils, vient de donner de ces descriptions une rédaction générale qui le présente avec ordre et clarté." It seems, therefore, that **1827** also is the correct date for this part of the Fishes.

VOL. I., part 2, *Ascidiens* by J. C. Savigny, pp. 1-58.

The date of this part is of no consequence, as all the specific names were issued by Savigny in 1816.

VOL. I., part 3, *Annelids* by J. C. Savigny, pp. 1-128. This was reviewed in the *Gött. gelehr. Anz.* (1827, p. 695). Engelmann, *Bibl. Hist. Nat.* p. 550, gives the date as 1820, but the review quoted above leaves little doubt that **1822** is the correct date.

VOL. I., part 4, *Explication des Planches* by V. Audouin. These consist of *Mollusca* (pp. 7-56), *Annelids* (57-76), *Crustacea* (77-98), *Arachnids* (99-186), *Insects* (187-202), *Echinoderms* (203-212), *Zoophytes* (213-214), *Ascidiens* (215-224), *Polypes* (225-244), *Oiseaux* (251-318). Engelmann, *Bibl. Hist. Nat.* p. 340, says that the Moll., Ann., Crust., Arach., Ins., Echin., and Ascid. were issued as fo. *Paris*, 1826. On p. 550 he says the descriptions of the Arachnida appeared fo. *Paris*, 1812; a statement quite inexplicable to me and considered by me as a mistake. F. S. Leuckart, 'Breves Anim. quorundam,' 1828, p. 15, refers to the plates of the Gasteropoda as 1812; and it may be that Engelmann's reference refers to the plates, and not the descriptions, of the Arachnida.

At the beginning of part 4 of Vol. I. there is a letter dated 19 Mars 1825, stating that the work of finishing had been entrusted to V. Audouin on account of the ill-health of Savigny. This is conclusive. See also *Ann. Soc. Entom. France*, xi., 1842, p. 99, where it is definitely stated that in 1826 the Government selected Audouin to give the descriptions to the plates of Mollusca and articulated animals. Dr. John Anderson tells me that he has ascertained that Savigny's sight failed him¹, and that no manuscripts of any kind were handed over to Audouin, so that Audouin had to begin *de novo*.

In the Reprint of the *Oiseaux* by the Willughby Society, the editor comes to the conclusion that it was published "not earlier than 1826."

In the 8vo edition of Savigny's 'Égypte,' the portion of the Natural History under consideration occupies vols. xxii. 1827, and xxiii. 1828.

Férussac, *Bull. Sci. Nat.* xix., 1829, p. 336, and xx., 1830, pp. 147 & 319, may be consulted with advantage.

I have no doubt myself that all the parts enumerated above may be safely regarded as dated **1826**.

VOL. II. *Mammifères* by Geoffroy, pp. 99-144. This is reviewed

¹ F. Caillaud, *Voy. à Meroë*, iv. 1827, p. 271.

in the *G. g. A.* (31 July 1819, p. 1203). *Mus cahirinus* is quoted, without page, in *Nouv. Dict. Hist. Nat.* xxix., 1819, p. 70, and *Rhinolophus tridens* on p. 253 (but in the latter instance the page of the text of Geoffroy's 'Égypte' is quoted). *Ichneumon edwardsii*, *I. gersius*, and others are also referred to by pages, on pp. 212 etc. of the same work. I regard this part as issued in **1818**. There is a very interesting proof of pp. 99-144 preserved in the Gray Tracts, Brit. Mus. (Nat. Hist.). It is paged 1-46 and has for signature 7 *H. N.*, and is dated 'l'Imprimerie impériale, Mars 1813.' This was sent by Geoffroy to Dr. J. E. Gray, and in a letter which accompanies it, *without date*, Geoffroy says:—"Je lui fais part dans cette livraison d'un imprimé tiré dans cette forme à deux exemplaires, et c'est la seule considération que je sais faire valoir pour rendre moins indigne de lui ce faible don de ma reconnaissance." Engelmann, *Bibl. Hist. Nat.* 1846, p. 373, quotes 1813.

VOL. II., *Mammifères* by Geoffroy and V. Audouin, pp. 733-743, and *Mammifères carnassiers* by V. Audouin, pp. 744-750. In Férussac, *Bull. Sci. Nat.* xix., 1829, p. 337, there is a footnote which states "La partie de l'ouvrage qui contient ce mémoire et le suivant [*i. e.* 'Mammifères' and 'Mammifères carnassiers'] vient seulement de paraître." This seems to be conclusive, and the date of these two parts may be accepted as **1829**.

VOL. I., part 1, pp. 53-62; VOL. I., part 4, pp. 245-250, and VOL. II., pp. 1-98, deal with Botany and Mineralogy, and do not come under this enquiry.

I am indebted to Mr. Boulenger, Dr. Anderson, and Mr. B. B. Woodward for many valuable suggestions during the progress of this enquiry, which has extended over several years.

6. Notes upon the Anatomy of *Phaethon*. By FRANK E. BEDDARD, M.A., F.R.S., Prosector to the Society.

As the genus *Phaethon* is one of the least known among the Steganopodes, and as it is regarded by Fürbringer as the most primitive form of that group, I am particularly grateful to Mr. J. J. Lister, of St. John's College, Cambridge, for allowing me to dissect a specimen.

I identify the specimen (a ♀) with *Phaethon flavirostris* of Brandt¹, as described by Mr. Lister in a paper upon the fauna of Christmas Island².

As to external characters, the oil-gland, as in other species of *Phaethon*, is densely tufted; the skin is very emphysematous; I

¹ "Tentamen Monogr. zool. generis *Phaethon*," Mém. Acad. Sci. St. Pétersb. (6) iii. 1840, p. 263.

² "On the Natural History of Christmas Island, in the Indian Ocean," P. Z. S. 1888, p. 528.